

Men and Books

DOCTORS AND MUSIC*

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One of the most fascinating by-paths of medical history is the relationship of doctors with the arts. We have often been reminded that Goldsmith, Keats and Schiller were physicians as well as poets, and we are proud to have had one of our number crowned as poet laureate in Robert Bridges. Our relationship with Art has been well told by Lord Moynihan and others. Professor McMurich has brought da Vinci again to our attention; and of course we have our own Tait McKenzie in the field of sculpture. But the contacts of medicine with music are scarcely so well known. And yet such contacts should not be surprising when we recall from Greek mythology that Æsculapius, the Father of Medicine, was given the divine power of healing by his father, Apollo, the god of light, and leader of the choir of Muses on the sunny heights of Parnassus. Indeed, the first discovery of music sprang out of the sister art. You remember the story of how, while the world was still young, one of the gods, walking along the sunlit shores of the Ægean, stumbled upon a turtle's shell. Turning it over in his hand, he found a sinew stretched across the hollow of the shell. He plucked the cord, and his marvelling ear heard the first music from this vibrating string. Thus was music born of Anatomy, and Anatomy stands in the foundation of Medicine.

A few men trained in medicine forsook their first love and became famous in the gentler art. HECTOR BERLIOZ (1803-1869) was born near Grenoble, and driven by his father, a country physician, into medicine. Disgusted by the horrors of the dissecting room, he turned to music. He entered the Conservatoire at 21, and in 1830 won the "Grand Prix de Rome" with his "Le Mort de Sardanapale". Whatever the loss to our profession may have been, we have been richly repaid by the records of his original and volcanic genius in the wealth of music which still makes his name live.

LEOPOLD DAMROSCH (1832-1885) is another of these. Born in Posen, he graduated in medicine in 1854, but immediately abandoned medicine and became a solo violinist. An intimate

friend of Wagner and Liszt, he soon became a much sought-after conductor. In 1871 he came to New York, where he first led the Männergesangverein, later the Oratorio Society and the Symphony Society. In 1885 he conducted the Metropolitan where he earlier had introduced German opera. His son, Walter Damrosch, is well known in the contemporary field of music.

A third musician who originally studied medicine was FRITZ KREISLER (1875-). Kreisler was born in Vienna, the son of an eminent physician who was also a music amateur. The boy studied some music, distinguishing himself at a very early age, and winning the "Grand Prix de Rome" at the age of 20. He was a student of medicine between 1889 and 1899. He has toured America more than once, and some of us have heard him. After three months' service, he was wounded in 1915; and since then has maintained his lofty position in the realm of contemporary violinists. He has written a good deal of music, one of which is the opera, "The Marriage Knot"; but his original and beautiful "Caprice Viennoise" is, perhaps, the best known to his many admirers.

One could almost add as a fourth a famous Russian musician, but he did not forsake medicine. ALEXANDER PROPHYRIEVICH BORODIN (1834-1887) was born in St. Petersburg. After graduating in medicine, he became professor of chemistry in the Academy of Medicine at the age of 28. He published frequently on chemistry, and assisted in the founding of the school of medicine for women, where he lectured in chemistry up to 1887, when he died from a ruptured aneurysm. However, his life in music overshadows his scientific work, and he has left us with a great number of compositions, of which his opera "Prince Igor" is an example. His music is marked by exquisite quality of melody, and his harmonies, though simple, are rich and effective.

But there is another group of men who made medicine their work, and yet who took more than a passing interest in contributions to the aesthetic side of the doctor's life.

Ancient and mediæval history tells us very little of the physician's interest in music, except, perhaps, for the occasional reference to music as a therapeutic agent. This subject can be traced even further back than the time when Saul was comforted by the charm of David's harp. You remember how it came to pass, when the evil spirit from God was upon Saul that David took a harp and played; so Saul was refreshed and was well, and the evil spirit departed from him. Indeed music formed an integral part of temple healing in the Golden Age of Greece. If time allowed, the progress of

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treatment by music to the present day would prove an interesting topic.

The Renaissance found numerous scholars delving into all the fields of knowledge, some for the sheer enjoyment of it, others in the effort to synthesize a true philosophy. This spirit is exemplified by Bacon, who says, in one of his essays, "The genius of music and of medicine are alike. The function of the physician is to tune the lyre of the human body so that it shall give forth sweet and harmonious sounds." Indeed, this analogy of the harmony of music with the harmony of the universe, which Plato emphasized, was repeatedly raised again in the days of the New Learning. Some of you will recall the closing paragraphs of Browne's "Religio Medici" which discuss the harmony in the music of the spheres.

FELIX PLATER (1534-1564) was a physician of Basel, and, besides being an accomplished lutanist, made a large collection of instruments. THOS. CAMPIAN (1567-1619) was a graduate of Cambridge who practised in London, where he was recognized at the same time as a poet and, particularly, as a musician. In music he occupies a high place among the song writers of his day and he has left us "Fowre Bookes of Ayres" as well as an interesting book on counterpoint. GEORGE ETHERIDGE (ca. 1585) was a physician, a graduate of Oxford, and was known as a distinguished vocalist and violinist. CORNELIUS BROCKLAND (first half of the 16th century) was a physician who lived in Holland, but he finally gave up practice and lived in Lyons, where he taught music and published a book of chansons.

In the 17th century we find several disciples of the sister arts. ATHANASIUS KIRCHER (1602-1683) was a Jesuit priest who acquired a mass of knowledge in widely different fields, such as music, mathematics, physics, microscopy and languages. In 1650 he published a massive two-volume encyclopædia on music, the "*Mussurgia universalis, sive ars magna consone et dissonæ in X libros digesta, qua universa sonorum doctrina, et philosophia musicæquæ tam theoricæ quam practicæ scientia summa varietate traditur*"—a wonderful conglomeration of information and rubbish.

PIERRE BOURDELLOT (1610-1685) of Sens, France, was abbé at Mace and a Royal physician who wrote a history of music. JOHN ARBUTHNOT (1667-1735), the friend and medical adviser of Pope, wrote numerous anthems, one of which, "As Pants the Hart" is still in the possession of the Chapel Royal. CASPAR BARTHOLINUS (1655-1738) was the son of the famous Danish anatomist. He wrote a book "*De Tibiis Veterum*"—a study of the double flutes of Greece, from which we derive our hautboy, clarinet, basset horn, and other reed instruments.

The 18th century brings us the record of HERMANN BOOERHAAVE (1668-1738), whose name

remains fresh in the history of clinical teaching, and who was an excellent vocalist and theorist. As well as being a good performer, he delighted in chamber music in his home. LEOPOLD AUENBRUGGER (1732-1809), the Father of Auscultation, was also a cultivated musician. He was a great friend of Baron Zois, whose Sunday concerts he frequently attended. He wrote the music for Salieri's opera, "The Chimney Sweep". Maria Theresa was much taken with the opera, and urged Auenbrugger to follow it up, but he said that he had better things to occupy himself with.

DR. HENRY HARINGTON (1728-1816) graduated in medicine from Oxford after having considered holy orders. He practised in Bath, where he was recognized as a citizen, a physician and a musician. He became alderman and later mayor of Bath, and, while still busily engaged with his practice, composed four volumes of glees, rounds and catches. His hymn tune "Harington" still stands in the hymnals of today, but his most familiar work is his beautiful setting of Jonson's "Drink to Me only with thine Eyes". WILLIAM WITHERING (1741-1799), of Birmingham, known to us all as the man who introduced the foxglove into our pharmacopœia, was an accomplished performer on the harpsichord and flute. EDWARD JENNER (1749-1821), the Father of Vaccination, was also a performer on the flute and violin. JOHN RING (1732-1821) was a great supporter of vaccination. Besides practising medicine, he wrote both poetry and music, and composed a work in commemoration of Handel. JOHN HUNTER (1728-1793) is known to have been much annoyed by his wife's musicales, but Anne more than compensated for this when she wrote the words for Haydn's oratorio, "The Creation".

When we come to the 19th century, we find still more doctors indulging seriously in music. SIR ROBERT CHRISTISON (1797-1882), the Edinburgh toxicologist, was the possessor of a splendid bass voice, and did a great deal of quartette work. He excelled himself by singing a solo on his eighty-third birthday. SIR WILLIAM FERGUSON (1808-1877), physician to Queen Victoria, was an exceptionally good violinist. WILLIAM KITCHINER (1775-1827) a graduate of Glasgow, practised medicine in London. He was also a cultivated amateur musician. His publications include a medical work called "The Art of Invigorating and Prolonging Life"; an opera, "Love Among the Roses"; and two volumes of national and sea songs. CORNEILLE KIST (1796-1863) was a Dutch physician who withdrew from practice in 1825, to spend the rest of his life at music. He was an excellent performer on the flute and the horn, and organized several music societies in the cities of Holland.

When the medical school of the London Hospital was opened in 1785, the founder, Sir

William Blizard, wrote an ode which was set to music by Dr. SAMUEL ARNOLD, and sung at the opening. We might also mention the Spanish tenor and vocal teacher of the Royal Academy, MANUEL GARCIA, who in 1845 first invented the laryngoscope. Another interesting doctor was ALFRED DAY (1810-1849) who practised homœopathy in London. He is remembered for his "Treatise on Harmony" which awakened the interest of the musicians of his day, and his new views received the support of Sir Henry H. Parry. EMILE JOSEPH MAURICE CHEVE (1804-1864) was a doctor of Finisterre who is to be remembered because of his valuable revival of the tonic sol-fa and movable Doh system, which had been forgotten since its invention in the 10th century.

HERMANN VON HELMHOLTZ (1821-1894) commenced his career as a surgeon in the Prussian Army. Later he became physiologist to several universities. In 1871, when he was professor of physics in Berlin, he published his work on tonal sensations, "Tonempfindungen", embodying a very thorough study of the theories of acoustics, which is still highly respected in the world of music. One of the most interesting characters of this period was THEODOR BILLROTH (1829-1894). This man, known to us all as the pioneer in gastric surgery, was born in Vienna, and was the grandson of a famous soprano. A devoted and talented follower of Æsculapius, he nevertheless found time to spend at music. He was an intimate friend of Brahms, the composer, and of Hanslick, the music critic; in fact, these three were often called "The music triumvirate of Vienna", who, detesting the Wagnerian influence, gave their approval to the classics of Bach, Beethoven, Haydn, Mozart and their successors. Brahms seldom published any music until he had first gained the approval of Billroth, whose home was noted for its distinguished musical soirées. In his modest way, Billroth often played second violin with Joachim, and also played the piano and composed some songs, many of which were sung on these evenings by his daughter to her father's accompaniment. Some of these were referred to in his "Briefe" which were published posthumously. He also published an exhaustive work on the physiology and psychology of music in his "Wer ist Musicalisch?"

About this same time JACOB HENLE (1809-1895), the anatomist, played all string instruments well, so that he could take part in quartette work. TRENDLENBERG showed an interest in music, and wrote extensively on the mechanism of the bow and stringed instruments. BERNARD NAUNYN (1839-1925), of Strasburg, was a lover of chamber music, and his wife was a talented soloist. WILHELM LUDWIG (1816-1895), of Leipzig, was also devoted to chamber music. HOFERAT EDMUND VON NEUSSER was an excellent pianist at this time. He was insepar-

ably wedded to the music of Chopin, whose temperament apparently suited his. In fact, Neusser memorized virtually all of Chopin's piano works, and spent hours at the piano after his busy days at the medical clinic in Vienna. ALFRED DE BARY, the psychiatrist and assistant to Fleschig, was at the same time a prominent tenor at Bayreuth; and DUKE KARL THEODOR of Bavaria, an ophthalmologist of note, enjoyed his leisure hours in the orchestra. The name of ENGELMANN, so well known in medicine must also be added to our list of music lovers.

On the continent one finds a larger number of doctors taking a serious interest in the arts. VON SCHLEICH, whose name is well known to us all, was well versed in music. VON KRIES, the successor of Billroth, was, like his master, a musician of note. In France history shows that BLONDEL won the Grand Prix with his "Vision de Dante"; and DUPRAT published the opera "Petrarque". RICHELLOT and PIERRE BONNIER were both musicians of note.

In Great Britain, SIR FRANCIS CHAMPNEYS published several anthems. Dr. W. A. AITKEN, the author of "The Voice", composed the music to "Sigh No More, Ladies" (Sonnet 18 of Shakespeare). Dr. HYSLOP, at one time in charge of Bethlem Hospital, London, was a composer of note. SIR CHARLES BELL, SEYMOUR HAYDEN and PRESCOTT HEWITT were all accomplished musicians.

Our American cousins have had numerous doctors who spent leisure hours in music. Colonel Fielding H. Garrison, himself a cultivated musician, has given us the names of several physicians who have been performers and even composers. He includes JAMES RUSH, the son of Benjamin Rush, SIDNEY KUH, D'ORSAY HECHT, OTTO JUETTNER, and GUSTAV LANGE-MANN. GERSTER, besides being a prominent physician, found time to devote to the organ as well as to etching. The professor of surgery at Buffalo a generation ago, ROSWELL PARK, was a great music lover and a finished violinist. JOHN C. HEMMETER, Professor of Physiology at the University of Maryland, one of the first to employ the duodenal tube, was a man of the broadest culture. He took a great interest in music, and in 1911 Carl Fischer published his beautiful "Hymn to Hygeia", which he had composed in honour of the late William Welch, of Johns Hopkins University. The story is told of Hemmeter's having saved the day for a Philadelphia orchestra whose leader was suddenly taken ill with gall-stone colic a few minutes before the hour of the recital at a seaside resort. Hemmeter took up the baton and led the faltering orchestra through its opening selection. The applause of the audience was joined by the excited approval of the members of the orchestra itself, and, after a word with the concertmeister, Hemmeter conducted the whole program to a successful close.

As for Canada, two names at least ought to be mentioned. WESLEY MILLS, Osler's successor at McGill, played the violin and published a book on the voice. The late dean of the medical school at Toronto, C. K. CLARKE, was an enthusiastic violinist, and his bow was always to be seen in the students' orchestra on "Dafydil Night".

And so, throughout the pages of the history of our profession there is to be found the sheen of a slender thread of the gentler art of music. Even among our contemporaries are to be seen a few who find in music a comfort and repose, a tranquil moment away from the lusty surge of an ever-driving vocation. With the master of Norwich, they can say "There is a musick where ever there is a harmony, order, or proportion: and thus far we may maintain the music of the Sphaers; for those well-ordered motions, and regular paces, though they give no sound

unto the ear, yet to the understanding they strike a note most full of harmony. Whosoever is harmonically composed delights in harmony. There is something in it of Divinity more than the ear discovers: it is an Hieroglyphical and shadowed lesson of the whole World, and creatures of God; such a melody to the ear, as the whole World, well understood, would afford the understanding. In brief, it is a sensible fit of that harmony which intellectually sounds in the ears of God."

The author wishes to record his deep appreciation of the assistance of music lovers, both lay and professional, on both sides of the Atlantic, without whose help this collection could not have been made as representative as it is.

BIBLIOGRAPHY

1. GARRISON, F. H.: Medical men who have loved music, *Bull. Soc. Med. Hist.*, 1920, 2: 158.
2. WEINFELD, E.: Medical men as musicians, *Ann. Inter. Med.*, 1930, 3: 1046.

Association Notes

The Meeting at Atlantic City

PROCEEDINGS OF SECTIONS

THE SECTION ON ORTHOPÆDIC SURGERY

This Section convened on June 12th, under the joint chairmanship of Dr. Robert D. Schrock, of Omaha, for the United States, and of Dr. R. I. Harris, of Toronto, for Canada.

Dr. Schrock's Address, as chairman, was on "Difficulties of Diagnosis in Bone Tumours". Dr. Harris's Address was entitled "Fat Embolism—a Dangerous Complication of Orthopædic Operations". It will appear in full in a later issue of the *Journal*.

The following papers were presented.

Comminuted Colles Fracture in Elderly Patients: Method of Treatment and the End-Results in Thirty Cases.—DR. G. E. HAGGART, Boston.

A survey of 30 patients aged 58 to 80 revealed that bony union is delayed as compared with similar fractures in younger individuals, and comminution of fragments is more frequent. Reduction of the fracture is most satisfactorily performed under the fluoroscope, following administration of a general anæsthetic. In reduction it is particularly important to re-establish the normal relationship of the radiocarpal joints and to secure anatomical reposition of the distal radio-ulnar joints. Firm splintage of the fracture should be maintained over a minimum period of five to seven weeks. The simplest and most efficient type of splint is the "sugar-tongs" plaster splint (Simpson). The splint should be so applied that free, normal range of motion of the interphalangeal and metacarpal phalangeal joints is permitted. The patient should abduct the arm at the shoulder joint through a normal range of motion. Following removal of the splint, physical therapy is begun.

Healing of the Newer Bumper Fractures of the Tibia.—DRS. W. G. STERN AND L. E. PAPURT, Cleveland.

A few years ago the "bumper" fracture was a fracture of the knee, because bumpers were placed higher than at present; now it occurs in the middle of the leg bone. The new "bumper" fracture is so characteristic that a physician can often tell by looking at an x-ray film of it that his patient has been struck by an automobile. The bone is usually broken in small pieces and sometimes it has pushed through the flesh, which is usually injured severely.

Dr. Stern's chief message was to emphasize the extreme slowness with which "bumper" fractures heal. The bones seldom unite in less than sixteen weeks; they often take much longer, and treatment should not be abandoned in less than a year. The average time in a series of more than 100 cases in his practice was six months, some having required as long as fifteen months.

Treatment: Primary reduction and fixation by the elected method. After six weeks the cast, if applied, is removed and a plaster mould of the leg is made. The plaster cast, this time, with walking iron is re-applied. By this time usually sufficient fibrosis has taken place within the fractured site so that the leg is no longer flail and the danger of the slipping fragments is no longer present. If this is not the case, the cast without the walking splint is re-applied for four to six weeks longer. From the mould a leather-steel envelope brace is constructed. This brace fits "like a glove" and allows full weight-bearing without any danger of angulation of fragments. By this weight-bearing circulation is improved and bone production is stimulated, and there is a gradual deposit of lime in the callus with increasing fixation of the fragments until solid union takes place.

Acute Anterior Poliomyelitis: A Study of the 1934 Epidemic in Southern California.—DRS. J. C. WILSON AND P. J. WALKER, Los Angeles.

A discussion of the 1934 California epidemic from an orthopædic point of view with special reference to the distribution, severity and duration of paralysis.